

## Claims

1. A device for continuous or semi-continuous casting of metals, comprising an electromagnetic brake which comprises  
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- at least two magnetic cores (25, 26; 27, 28), arranged on one side of a mould (31) and attached thereto, and  
- a yoke (32, 33), which is detachably connected to the two magnetic cores (25, 26; 27, 28) and interconnects them,  
10 characterized in that said yoke (32, 33) carries at least one coil (36, 37), substantially between the two magnetic cores (25, 26; 27, 28) interconnected by the yoke (32, 33).
2. A device according to claim 1, characterized in that the  
15 mould (31) is rectangular transversal to the casting direction and has two opposite long sides (29, 30), along one of which the yoke (32, 33) extends substantially parallel thereto and that the coil (36, 37) is wound around the yoke (32, 33) such that the centre axis of the coil (36, 37) is sub-  
20 stantially parallel to said long side (29, 30).
3. A device according to claim 2, characterized in that the  
centre axis of the coil (36, 37) extends substantially perpen-  
25 dicularly to the casting direction in the mould (31).
4. A device according to any of claims 1-3, characterized in  
that the magnetic cores (25, 26, 27, 28) are permanently se-  
cured to the mould (31).
- 30 5. A device according to any of claims 1-4, characterized in  
that the magnetic cores (25-28) are arranged with a space  
therebetween and that the coil (36, 37) is positioned substan-  
tially right in front of said space.
- 35 6. A device according to any of claims 1-5, characterized in  
that the yoke (32, 33) substantially defines a bar or plate, and

that the coil (36, 37) is wound around a centre portion (34, 35) of the bar or plate.

- 5 7. A device according to any of claims 1-6, characterized in that the magnetic cores (25, 26; 27, 28) cover substantially the entire width of the mould (31), except for a centre portion of the mould (31).
- 10 8. A device according to any of claims 1-7, characterized in that the yoke (32, 33) comprises a portion (34, 35) which is detachable from the rest of the yoke (32, 33) and carries the coil (36, 37).
- 15 9. A device according to claim 8, characterized in that the yoke (32, 33) defines a cradle arranged to receive the portion (34, 35) carrying the coil (36, 37) and allow displacement of said portion (34, 35) substantially vertically out of said cradle.
- 20 10. A device according to claim 9, characterized in that the yoke (32, 33), in addition to said portion (34, 35) carrying the coil (36, 37), comprises two yoke parts (38, 39; 40, 41), arranged on opposite sides of this portion (34, 35), forming said cradle and each having a surface (46, 47; 48, 49) adapted to abut against a respective magnetic core (25, 26; 27, 28).
- 25 11. A device according to any of claims 1-10, characterized in that the yoke (32, 33) comprises at least one portion (42-45) being detachably connected to the rest of the yoke (32, 33) and arranged to be detached for access of parts of the device which are arranged vertically under the electromagnetic brake.
- 30 12. A device according to claim 11, characterized in that said portion (42-45) is a peripheral portion of the yoke (32, 33) being pivoted relative to the rest of the yoke (32, 33).
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13. A yoke for an electromagnetic brake (24) of a device for continuous or semi-continuous casting of metals, comprising two separate surfaces adapted to detachably abut against one magnetic core (25, 26; 27, 28) each of two magnetic cores (25, 26; 27, 28) arranged on one side of a mould (31),  
5 characterized in that it carries a coil (36, 37) being wound around the yoke (32, 33) substantially between said surfaces (46, 47; 48, 49).
- 10 14. A yoke according to claim 13, characterized in that it is elongated, that said surfaces (46, 47; 48, 49) extend substantially in parallel with its longitudinal direction and that the coil (36, 37) is wound transversal to said longitudinal direction such that its centre axis is substantially parallel to the  
15 longitudinal direction.
15. A yoke according to claim 13 or 14, characterized in that it comprises a portion (42, 43; 44, 45) which is detachable from the rest of the yoke and carries the coil (36, 37).
- 20 16. A yoke according to claim 15, characterized in that it defines a cradle arranged to receive the portion (34, 35) carrying the coil (36, 37) and allow displacement of said portion (34, 35) substantially vertically out of said cradle.
- 25 17. A yoke according to claim 15 or 16, characterized in that it, in addition to the portion (34, 35) carrying the coil (36, 37), comprises two yoke parts (38, 39; 40, 41), arranged on opposite sides of this portion (34, 35), forming said cradle and having the surfaces (46, 47; 48, 49) which are adapted to  
30 abut against a respective magnetic core (25, 26; 27, 28).
18. A yoke according to any of claims 13-17, characterized in that it comprises at least one portion (42, 43; 44, 45) being  
35 detachably connected to the rest of the yoke (32, 33) and ar-

ranged to be detached for access of parts of the device which are arranged vertically under the electromagnetic brake.

- 5 19. A yoke according to claim 18, characterized in that said portion (42, 43; 44, 45) is a peripheral portion of the yoke (32, 33) which is pivoted relative to the rest of the yoke (32, 33).
- 10 20. A device for continuous or semi-continuous casting of metals, comprising an electromagnetic brake which comprises
- at least two magnetic cores (25, 26; 27, 28), arranged on one side of a mould (31) and attached thereto, and
  - a yoke (32, 33), which is detachably connected to the two
- 15 magnetic cores (25, 26; 27, 28) and interconnects them, said yoke (32, 33) carrying at least one coil (36, 37), substantially between the two magnetic cores (25, 26; 27, 28) interconnected by the yoke (32, 33), characterized in
- 20 such that the centre axis of the coil (36, 37) is wound around the yoke (32, 33) such that the centre axis of the coil (36, 37) is substantially parallel to one long side (29, 30) of the mould (31), that the centre axis of the coil (36, 37) extends substantially perpendicularly to the casting direction in the mould (31) and that
- 25 the magnetic cores (25, 26; 27, 28) cover substantially the entire width of the mould (31), except for a centre portion of the mould (31).